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EXAMINER	
DESIR, PIERRE LOUIS	
ART UNIT	**PAPER NUMBER**
2681	

DATE MAILED: 11/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/644,996	CHUN, CHANG-HYEN	
	Examiner	Art Unit	
	Pierre-Louis Desir	2681	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 September 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *21 August 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed on 09/19/2005 have been fully considered but they are not persuasive.

Applicant states that the present invention performs a backup of a present radio link set and changes the present radio link set. In other words, only the new, changed radio link will be maintained for communication. If certain time duration expires, the backup radio link will be restored to replace the changed radio link based upon the backup radio link set. Therefore, the backup radio link and the new radio link are not simultaneously maintained. Based on that analysis, Applicant argues that Hagting fails to cure the deficiencies of Kim since Hasting discloses that to execute a seamless handover, during a certain period of time two duplex radio links between a radio access unit and a communication unit have to be maintained simultaneously. And, in the case of a handover request, the call at the first radio link is maintained while a second radio link is established. Only if data over the second radio link is successfully exchanged in both directions, the first radio link is terminated. In other words, adds Applicant, two radio links are maintained simultaneously during a certain period of time.

Examiner respectfully disagrees. The claim limitation broadly states, "performing a backup of a present radio link set and changing the present radio link set, when the radio link set request is provided," and "reverting the changes radio link set back to the backed-up radio link set when the reply signal is not received from the RNC within a certain time duration." Accordingly, Examiner broadly interprets the claim language.

Hagting discloses that a call with a remote unit is handed over from a first radio access unit to a second radio access unit by suspending transmission of the remote unit at a first radio link while maintaining the transmission at this first radio link by the first radio access unit is established by the remote unit and the call is resumed at the second radio link after which the radio link is released by the first radio access unit) (see abstract). Hasting also discloses that the call at the first radio link is maintained while a second radio link is established. And, if data link is successfully exchanged in both directions, the first radio link is terminated (see col. 3, lines 20-27). Therefore, one skilled in the art would immediately envision that by suspending transmission of the remote unit at a first radio link, this radio link is inherently backed up so that transmission could be maintained at this first radio link by the first radio access unit in case data over the second radio link is not successfully exchanged (see col. 3, lines 20-27), because if data over the second link is not successfully exchanged, the first radio link will not be terminated.

Applicant does not specifically disclose in the claim language that only the new, changed radio link will be maintained for communication, as stated in the Remarks section. Thus, Applicant is respectfully invited to amend the claim language with the specified disclosure, as stated in the Remarks section.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-2, 4-5, 7-9, 11-12, 14, 16-20, 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al. (Kim), Pub. No. US 20030031119, in view of Hagting et al. (Hagting), U.S. Patent No. 6236860.

Regarding claim 1, Kim discloses a handover processing method for a mobile communication system (see figs. 1-3), the method comprising: requesting a radio link set to a radio network controller (i.e., the SRNC transmits a radio link set up request message) (see page 2, paragraph 20); transmitting a radio link set completion message to the RNC (i.e., transmits a radio link setup response message to the SNRC) (see page 2, paragraph 20); checking whether a reply signal in response to the radio link set completion is received (i.e., determines whether a radio link setup response message has been received) (see fig. 15, page 8, paragraph 90).

Although Kim discloses a method as described, Kim does not to specifically disclose a method comprising performing a backup of a present radio link set and changing the present radio link set, when the radio set request is provided; and reverting the changes radio link set back to the backed-up radio link set when the reply signal is not received from the RNC within a certain time duration.

However, Hagting discloses a handover processing method comprising performing a backup of a present radio link set and changing the present radio link set, when the radio set request is provided (i.e., a call with a remote unit is handed over from a first radio access unit to a second radio access unit by suspending transmission of the remote unit at a first radio link while maintaining the transmission at this first radio link by the first radio access unit is established by the remote unit and the call is resumed at the second radio link after which the radio link is released by the first radio access unit) (see abstract); and reverting the changes radio

link set back to the backed-up radio link set when the reply signal is not received from the RNC within a certain time duration (i.e., the call at the first radio link is maintained while a second radio link is established. If data over the second link is successfully exchanged in both directions, the first radio link is terminated) (see col. 3, lines 20-27).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine both arts to arrive at the claimed invention. A motivation for doing so would have been to provide a handover method, which can be used in synchronously and asynchronously operated environments.

Regarding claim 2, Kim discloses a method as described above (see claim 1 rejection).

Although Kim discloses a method comprising checking whether the reply signal is received (see fig. 15, page 8, paragraph 90); retransmitting the radio link set completion message when the reply signal is not received (i.e., as seen in fig. 15, if the radio link setup response is not received, there will be a retransmission) (see fig. 15); checking whether the reply signal is received after the retransmission (see fig. 15, page 8, paragraph 90), Kim does not specifically disclose a method comprising reverting the radio link set to the backed-up radio link set when the reply signal is not received within the first time duration.

However, Hagting discloses a handover processing method comprising reverting the changes radio link set back to the backed-up radio link set when the reply signal is not received from the RNC within a certain time duration (i.e., the call at the first radio link is maintained while a second radio link is established. If data over the second link is successfully exchanged in both directions, the first radio link is terminated) (see abstract, col. 3, and lines 20-27).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine both arts to arrive at the claimed invention. A motivation for doing so would have been to provide a handover method, which can be used in synchronously and asynchronously operated environments.

Regarding claim 4, Kim discloses a handover processing method for a mobile communication system (see figs. 1-3), the method comprising: starting a handover procedure (i.e., once the UE 130 enters the soft handover region, the SRNC 121 recognizes it from a Measurement Report received from the UE 130 and determines to establish new radio links) (see page 2, paragraph 20); requesting a radio link set to a radio network controller (RNC) when the handover procedure starts (i.e., the SRNC transmits a radio link set up request message) (see page 2, paragraph 20); operating a first timer after the changing step (i.e., the reception indicator indicates an action time of transmitting user data) (see page 3, paragraph 22); transmitting a radio link set completion message to the RNC (i.e., transmits a radio link setup response message to the SNRC) (see page 2, paragraph 20) and waiting for a reply signal in response to the radio link set completion message (i.e., determines whether a radio link setup response message has been received) (see fig. 15, page 8, paragraph 90); and finishing the handover procedure (see page 2, paragraph 20).

Although Kim discloses a method as described, Kim does not specifically disclose a method comprising performing a backup of a present radio link set and changing the present radio link set when the radio link set request is approved; reverting the changed radio link set back to the previous backed-up radio link set when the reply signal is not received and the first timer has expired.

However, Hagting discloses a handover processing method comprising performing a backup of a present radio link set and changing the present radio link set when the radio link set request is approved (i.e., a call with a remote unit is handed over from a first radio access unit to a second radio access unit by suspending transmission of the remote unit at a first radio link while maintaining the transmission at this first radio link by the first radio access unit is established by the remote unit and the call is resumed at the second radio link after which the radio link is released by the first radio access unit) (see abstract); and reverting the changed radio link set back to the previous backed-up radio link set when the reply signal is not received and the first timer has expired (i.e., the call at the first radio link is maintained while a second radio link is established. If data over the second link is successfully exchanged in both directions, the first radio link is terminated) (see col. 3, lines 20-27).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine both arts to arrive at the claimed invention. A motivation for doing so would have been to provide a handover method, which can be used in synchronously and asynchronously operated environments.

Regarding claim 5, Kim discloses a method (see claim 4 rejection) wherein if the reply signal is received before the first timer expires, the finishing step is performed by bypassing the reverting step (i.e., upon receipt of the radio link set up response message, the SNRC establishes a transmission with the active set node) (see fig. 15, and page 8, paragraph 90).

Regarding claim 7, Kim discloses a method (see claim 4 rejection) further comprising retransmitting the radio link set completion message when the reply is not received for a certain

time (i.e., as seen in fig. 15, if the radio link setup response is not received, there will be a retransmission) (see fig. 15).

Regarding claim 8, Kim discloses a method (see claim 7 rejection) wherein the retransmitting step includes the sub-steps of: transmitting the radio link set completion message (i.e., transmits a radio link setup response message to the SNRC) (see page 2, paragraph 20) and operating a second timer (see page 6, paragraph 75); checking whether the reply signal is received within an operation time of the second timer (see fig. 15, page 8, paragraph 90); retransmitting the radio link set completion message when the reply signal is not received even though the second timer has expired (i.e., as seen in fig. 15, if the radio link setup response is not received, there will be a retransmission) (see fig. 15); and checking whether the reply signal is received within an operation time of the first timer (see fig. 15, page 8, paragraph 90).

Regarding claim 9, Kim discloses a method (see claim 8 rejection) wherein the second timer is operated at a radio link control layer of user equipment (see page 6, paragraph 75).

Regarding claim 11, Kim discloses a handover processing method for a mobile communication system (see figs. 1-3), the method comprising: requesting a radio link set to a radio network controller (RNC) (i.e., the SRNC transmits a radio link set up request message) (see page 2, paragraph 20); and operating a first timer (i.e., the reception indicator indicates an action time of transmitting user data) (see page 3, paragraph 22); transmitting a radio link set completion message to the RNC (i.e., transmits a radio link setup response message to the SNRC) (see page 2, paragraph 20) and operating a second timer (see page 6, paragraph 75); checking whether a reply signal in response to the radio link set completion message is received from the RNC (see fig. 15, page 8, paragraph 90); retransmitting the radio link set completion

message when the reply signal is not received and the second timer has expired (i.e., as seen in fig. 15, if the radio link setup response is not received, there will be a retransmission) (see fig. 15).

Although Kim discloses a method as described, Kim fails to does not specifically describe a method comprising performing a backup of a present radio link set when the radio link set request is approved and changing the present radio link set; and reverting the changed radio link set back to the backed-up radio link set when the reply signal is not received and the first timer has expired.

However, Hagting discloses a handover processing method comprising performing a backup of a present radio link set when the radio link set is approved and changing the present radio link set (i.e., a call with a remote unit is handed over from a first radio access unit to a second radio access unit by suspending transmission of the remote unit at a first radio link while maintaining the transmission at this first radio link by the first radio access unit is established by the remote unit and the call is resumed at the second radio link after which the radio link is released by the first radio access unit) (see abstract); and reverting the changes radio link set back to the backed-up radio link set when the reply signal is not received an the first time has expired (i.e., the call at the first radio link is maintained while a second radio link is established. If data over the second link is successfully exchanged in both directions, the first radio link is terminated) (see col. 3, lines 20-27).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine both arts to arrive at the claimed invention. A motivation for doing so

would have been to provide a handover method, which can be used in synchronously and asynchronously operated environments.

Regarding claim 12, Kim discloses a method (see claim 11 rejection) wherein when the reply signal is received during the first or second timer operation time, the reverting step is bypassed and the handover processing is completed (i.e., upon receipt of the radio link set up response message, the SNRC establishes a transmission with the active set node) (see fig. 15, and page 8, paragraph 90).

Regarding claim 14, Kim discloses a method (see claim 11 rejection) wherein the second timer is operated at a radio link control layer of user equipment (see page 6, paragraph 75).

Regarding claim 16, Kim discloses a method of preventing abnormal handover operation, the method comprising: modifying a current radio link set at a user device and then transmitting a completion message to a network device (see page 2, paragraph 20); checking whether a response signal in response to the completion message is received at the user device (i.e., determines whether a radio link setup response message has been received) (see fig. 15, page 8, paragraph 90).

Although Kim discloses a method as described, Kim does not to specifically disclose a method comprising reverting the modified radio link set to a backup radio link set if the reply signal is not received within a first time duration.

However, Hagting discloses a handover processing method comprising reverting the changes radio link set back to the backed-up radio link set when the reply signal is not received from the RNC within a certain time duration (i.e., the call at the first radio link is maintained

while a second radio link is established. If data over the second link is successfully exchanged in both directions, the first radio link is terminated) (see col. 3, lines 20-27).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine both arts to arrive at the claimed invention. A motivation for doing so would have been to provide a handover method, which can be used in synchronously and asynchronously operated environments.

Regarding claim 17, Kim discloses a method (see claim 16 rejection) wherein the response signal is an acknowledgement signal from the network device that acknowledges a receipt of the completion message (see fig. 15, page 8, paragraph 90).

Regarding claim 18, Kim discloses a method (see claim 16 rejection) wherein the network device is a radio network controller in a mobile communication system (i.e., RNC) (see abstract).

Regarding claim 19, Kim discloses a method (see claim 16 rejection) wherein, the checking step, the response signal is a confirmation signal that confirms a receipt of an acknowledgement signal from the network device, the acknowledgment signal acknowledging a receipt of the completion message (see fig. 15, page 8, paragraph 90).

Regarding claim 20, Kim discloses a method (see claim 19 rejection) further comprising: checking whether the acknowledgement signal is received within a second time duration (see fig. 15, page 8, paragraph 90); and retransmitting at least once the completion message to the network device if no acknowledgement signal is received during the second time duration (i.e., as seen in fig. 15, if the radio link setup response is not received, there will be a retransmission) (see fig. 15).

Regarding claim 22, Kim discloses a method (see claim 19 rejection) wherein the network device is a radio network controller in a mobile communication system (i.e., RNC) (see abstract).

4. Claims 3, 6, 10, 13, 15, 21, 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim and Hagting in further view of Zeira et al. (Zeira), Pub. No. US 20040114574.

Regarding claim 3, Kim and Hagting disclose a method as described above (see claim 2 rejection).

Although the combination discloses a method as described, the combination fails to specifically disclose a method wherein the first time duration is the same as or greater than a sum of the second time duration and the retransmission time.

However, Zeira discloses a handover method in which the radio network controller determines if the back-to-back allocation is needed for new data or for new retransmission. For retransmission, the allocation is extended for the duration necessary for the retransmission, wherein maximum and minimum time duration can be defined. In that case the allocated duration should not exceed the maximum duration (see page 5, paragraphs 80-83). Thus, one skilled in the art would unhesitatingly envision that first duration would be the same as the retransmission time since the retransmission time cannot exceed the maximum time duration.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine both arts to arrive at the claimed invention. A motivation for doing so would have been to provide a time period to account for the signaling delay, which may occur.

Regarding claim 6, Kim and Hagting disclose a method as described above (see claim 4 rejection).

Although the combination discloses a method as described, the combination fails to specifically disclose a method wherein the first timer is operated at a RRC layer of user equipment.

However, Zeira discloses a handover method wherein a timer is operated at a RRC layer of user equipment (i.e., when a configuration or reconfiguration procedure is invoked, the new configuration must take effect at the activation time determined by the RNC RRC) (see page 19, paragraph 556).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine both arts to arrive at the claimed invention. A motivation for doing so would have been to provide a time period to account for the signaling delay, which may occur.

Regarding claim 10, Kim and Hagting disclose a method as described above (see claim 8 rejection).

Although the combination discloses a method as described, the combination fails to specifically disclose a method wherein the operation time of the first timer is the same as or greater than a sum of the operation time of the second timer and the retransmission time.

However, Zeira discloses a handover method in which the radio network controller determines if the back-to-back allocation is needed for new data or for new retransmission. For retransmission, the allocation is extended for the duration necessary for the retransmission, wherein maximum and minimum time duration can be defined. In that case the allocated duration should not exceed the maximum duration (see page 5, paragraphs 80-83). Thus, one

skilled in the art would unhesitatingly envision that first duration would be the same as the retransmission time since the retransmission time cannot exceed the maximum time duration.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine both arts to arrive at the claimed invention. A motivation for doing so would have been to provide a time period to account for the signaling delay, which may occur.

Regarding claim 13, Kim and Hagting disclose a method as described above (see claim 11 rejection).

Although the combination discloses a method as described, the combination fails to specifically disclose a method wherein the first timer is operated at a RRC layer of user equipment.

However, Zeira discloses a handover method wherein a timer is operated at a RRC layer of user equipment (i.e., when a configuration or reconfiguration procedure is invoked, the new configuration must take effect at the activation time determined by the RNC RRC) (see page 19, paragraph 556).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine both arts to arrive at the claimed invention. A motivation for doing so would have been to provide a time period to account for the signaling delay, which may occur.

Regarding claim 15, Kim and Hagting disclose a method as described above (see claim 11 rejection).

Although the combination discloses a method as described, the combination fails to specifically disclose a method wherein the operation time of the first timer is the same as or greater than a sum of the operation time of the second timer and the retransmission time.

However, Zeira discloses a handover method in which the radio network controller determines if the back-to-back allocation is needed for new data or for new retransmission. For retransmission, the allocation is extended for the duration necessary for the retransmission, wherein maximum and minimum time duration can be defined. In that case the allocated duration should not exceed the maximum duration (see page 5, paragraphs 80-83). Thus, one skilled in the art would unhesitatingly envision that first duration would be the same as the retransmission time since the retransmission time cannot exceed the maximum time duration.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine both arts to arrive at the claimed invention. A motivation for doing so would have been to provide a time period to account for the signaling delay, which may occur.

Regarding claim 21, Kim and Hagting disclose a method as described above (see claim 20 rejection).

Although the combination discloses a method as described, the combination fails to specifically disclose a method wherein the first time duration is equal to or greater than a sum of the second time duration and the retransmission time.

However, Zeira discloses a handover method in which the radio network controller determines if the back-to-back allocation is needed for new data or for new retransmission. For retransmission, the allocation is extended for the duration necessary for the retransmission, wherein maximum and minimum time duration can be defined. In that case the allocated duration should not exceed the maximum duration (see page 5, paragraphs 80-83). Thus, one skilled in the art would unhesitatingly envision that first duration would be the same as the retransmission time since the retransmission time cannot exceed the maximum time duration.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine both arts to arrive at the claimed invention. A motivation for doing so would have been to provide a time period to account for the signaling delay, which may occur.

Regarding claim 23, Kim and Hagting disclose a method as described above (see claim 16 rejection).

Although the combination discloses a method as described, the combination fails to specifically disclose a method wherein a timer at a radio resource control layer of the user device controls the first time duration.

However, Zeira discloses a handover method wherein a timer is operated at a RRC layer of user equipment (i.e., when a configuration or reconfiguration procedure is invoked, the new configuration must take effect at the activation time determined by the RNC RRC) (see page 19, paragraph 556).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine both arts to arrive at the claimed invention. A motivation for doing so would have been to provide a time period to account for the signaling delay, which may occur.

Regarding claim 24, Kim and Hagting disclose a method as described above (see claim 16 rejection).

Although the combination discloses a method as described, the combination fails to specifically disclose a method wherein first and second timers at a radio resource control layer of the user device control the first and second time durations, respectively.

However, Zeira discloses a handover method wherein first and second timers at a radio resource control layer of the user device control the first and second timer (see page 16, paragraph 524 and page 19, paragraph 556).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine both arts to arrive at the claimed invention. A motivation for doing so would have been to provide a time period to account for the signaling delay, which may occur.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pierre-Louis Desir whose telephone number is (571) 272-779. The examiner can normally be reached on Monday-Friday 8:00AM- 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on (571) 272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

pd

Pierre-Louis Desir
AU 2681
11/26/2005

JOSEPH FEILD
SUPERVISORY PATENT EXAMINER